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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,854	10/17/2003	Ralph M. Pivonka	2-1271-013	9571
803 7590 04/04/2007 STURM & FIX LLP 206 SIXTH AVENUE SUITE 1213 DES MOINES, IA 50309-4076			EXAMINER MCKANE, ELIZABETH L	
			ART UNIT 1744	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/04/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/687,854

Applicant(s)

PIVONKA, RALPH M.

Examiner

Leigh McKane

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☒ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Specification***

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Although illustrated by Figure 6, the specification does not describe the substantially horizontal orientation of the burners, as claimed in amended claim 5.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In line 2 of the claim, “the skin” lacks positive antecedent basis because this element has not been previously recited in either claim 15, or claim 5 from which claim 15 depends.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koboura (JP 06-078658) in view of Jones (US 5,030,086).

With respect to claims 1-3 and 18, Koboura teaches an apparatus and method for sterilizing a surface using a mobile, enclosed flamer. The flamer includes a wheels, a hood, and a plurality of burners **1**. The method includes transporting the flamer to a location where the flames are contained within the hood to sterilize the soil with hot air while the flamer is drawn by a tractor. Koboura does not disclose setting the flamer on skids.

Jones teaches a flamer wherein skids **S** are employed to support a burner above the ground surface. See Figure 5. As both Jones and Koboura are used for flame cultivation and as Jones evidences the common use of skids as a means to support the weight of crop treatment devices, they would have been an obvious addition to the invention of Koboura.

As to claim 4, it is noted that the term “adjustable” only requires the ability to be adjusted and does not require an express teaching by the reference to be “adjustable”. As the entire apparatus of Koboura is capable of being tilted upwards by merely pressing down on the hitch, resulting in the “adjusting” of the burner angle, the burner angle of Koboura is “adjustable” during sterilization.

6. Claims 5 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones.

With respect to claims 5, 11, 13, Jones teaches an apparatus for sterilizing a surface (see Abstract) wherein the apparatus includes a hood **11** for containing a flame and a burner **18** situated under the hood and oriented so a flame direction is substantially horizontal. See Figures 3 and 6. Ground engaging skids **S** are employed to support a burner above the ground surface at all times. See Figure 5. As illustrated in Figure 1 and disclosed in col.2, lines 8-13, the

apparatus is towed by a tractor T “in a conventional manner.” The tractor has a fuel tank 32 mounted thereon. Although Jones does not expressly teach that the apparatus is connected to the tractor by a hitch, the Examiner submits that a hitch would have been obvious to one of ordinary skill in the art as being “conventional.”

As to claim 12, Jones teaches that the burner housing, and thus the burner, is adjustable about a pivot 36 “through a wide range of positions to assure effective burning and destruction of weeds, insects, micro-organisms, and the like.” See col.3, lines 48-58.

With respect to claim 14, since Jones discloses that the burner is height adjustable over the ground (col.3, lines 33-39), it would have been obvious to provide a means to adjust the height of the skid as well.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jones as applied to claim 5 above, and further in view of Benjamin (US 5,826,371).

The hood of Jones is fabricated from only a skin and does not have an external frame. Benjamin teaches an apparatus for flame cultivation wherein the hood 30 is comprised of a frame 33 and a skin 32. It would have been obvious to one of ordinary skill in the art to provide a skin supported by a frame in the apparatus of Jones, as doing so allows for a lightweight skin to be used.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jones as applied to claim 5 above, and further in view of Clarke (US 4,420,901).

Jones fails to disclose a three-point hitch. Clarke, however, teaches use of a three-point

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hitch on a flamer. See col.2, lines 15-18. As Clarke evidences the use of a three-point hitch is common in agricultural implements, specifically flame cultivators, it would have been an obvious means of connecting the flame cultivator of Jones to the tractor T.

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jones as applied to claim 5 above, and further in view of Stephenson et al. (US 4,805,927).

Jones is silent with respect to a quick coupler as the hitch. Stephenson et al. teaches an implement hitch having a quick coupler 68 for connection with a quick coupler 18 of a tractor. It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the quick coupler of Stephenson et al. to connect the flame cultivator of Jones to the tractor T as Stephenson et al. evidences the use of such in connecting agricultural implements to tractors.

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jones as applied to claim 5 above, and further in view of Miles (US 4,088,122).

Jones is silent with respect to wheels for bearing a weight of the flamer and that the hitch is a tongue. Miles discloses a flamer having a tongue hitch 38 for connecting to a draw bar 39 of a tractor. The flamer is supported by wheels 20,22,24,26. It would have been obvious to one of ordinary skill in the art to substitute the wheels of Miles for the skids of Jones, as they are functional equivalents. Moreover, one would have found it obvious to use a tongue hitch to connect the flamer of Jones to the tractor since Miles has demonstrated the effectiveness of this type of connection in flame cultivators.

11. Claims 10, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones as applied to claim 5 above, and further in view of Koboura.

With respect to claim 10, the fuel tank of Jones is mounted on the tractor T, not on the

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hood. However, Koboura evidences a fuel tank **2** mounted on the top of hood **12**. As both locations are available to the practitioner and both offer advantages of their own, the choice of one over the other is deemed obvious as involving no invention or unexpected results.

As to claims 15 and 16, Jones is silent with respect to insulation over the hood opposite the burner. Koboura, however, discloses insulated side panels **18** located opposite the burner and an insulated top covering **19** located between the hood and fuel tank. The Examiner submits that one in the art would have placed the insulation on the outside of the hood of Koboura, in order to avoid damage to the insulation by the heat, rotary pawl **13**, and blowing soil. Moreover, it would have been obvious to add the insulation of Koboura to the hood of Jones in order to reduce heat loss through the hood and to flame temperature, as disclosed by Koboura.

12. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Opfel (US 2003/0192485).

Opfel teaches a method of sterilizing poultry litter wherein a flamer is employed to heat accumulated poultry litter such that it is sterilized. See paragraphs [0032], [0092], and [0106]. The flame may be under a hood that extends over the litter. The method may be performed *in situ*- that is, the flamer and hood are *transported* to a location, for example a stall, etc. where the litter is located. Although Opfel does not disclose putting the flamer on skids, it is obvious from the disclosure of Opfel that the flamer is in a stationary and spaced position over the litter. As skids are an obvious means of supporting a flamer in this configuration, they would have been an obvious addition to the method of Opfel.

***Allowable Subject Matter***

13. Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach or suggest the apparatus of claim 18 and further including rake teeth disposed forward of the burners and under the hood and a barrier disposed between the rake teeth and the burners under the hood.

***Response to Arguments***

15. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

16. Inasmuch as the apply to the instant rejections, the Examiner will address Applicant's arguments concerning Koboura and Opfel. With respect to Koboura, on page 6 of the Response, Applicant submits that "nowhere in the referenced documents by Koboura is a fuel tank mentioned." However, the Examiner notes that in fact, in Figures 1 and 2, a fuel tank is referenced by Figure 2. Moreover, in the Description of the Drawings, reference numeral 2 is described as "Fuel Tank." There can be no clearer teaching of a fuel tank than this. Applicant goes on to argue on page 7 that Koboura does not suggest transporting the flamer to a location. The Examiner would like to point out that the *only* way to get the flamer of Koboura to a location in need of sterilization is to transport it. Where a step is intrinsic, there need by no explicit teaching by the reference. On page 8 of the Response, Applicant submits that the



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“surface” cannot be both the ground surface and the surface of material being tilled and thrown up to the flame nozzles. The Examiner respectfully disagrees with the Applicant. As the soil is in the air only momentarily and then falls back down, it is certainly the same surface upon which the flamer is moved.

As to Opfel, Applicant contends on page 13 of the Response that skids are for moving an object and that the hood of Opfel is meant to be stationary. Foremost, it is noted that in addition to the definitions provided by Applicant, another definition for skid is “a small platform for stacking merchandise to be moved *or temporarily stored*” as given by Webster’s II New Riverside University Dictionary. The hood of Opfel, because it is used *in situ*, must be moved from a first location to a second *use* location where it is temporarily used. Thus, a skid would have fulfilled the requirements of the apparatus of Opfel exceedingly well.

### ***Conclusion***

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leigh McKane whose telephone number is 571-272-1275. The examiner can normally be reached on Monday-Friday (5:30 am-2:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**Leigh McKane**  
**Primary Examiner**  
**Art Unit 1744**

elm  
30 March 2007